NASA EARTH SYSTEM SCIENCE AWARD

Includes studies of the environment and its effect on organisms and/or systems, as well as studies of the various components of Earth systems, their interactions and their evolution.

Subcategories (Based on those used by INTEL):

Atmospheric Science (AIR): Studies of the earth's atmosphere, including air quality and pollution and the processes and effects of the atmosphere on other Earth systems as well as meteorological investigations.

Climate Science (CLI): Studies of Earth's climate, particularly evidential study of climate change as it relates to Earth's systems.

Environmental Effects on Ecosystems (ECS): Studies of the impact of environmental changes (natural or as a result of human interaction) on ecosystems, including empirical pollution studies.

Geosciences (GES): Studies of Earth's land processes, including mineralogy, plate tectonics, volcanism, and sedimentology.

Water Science (WAT): Studies of Earth's water systems, including water resources, movement, distribution, and water quality.

Other (OTH): Studies that cannot be assigned to one of the above subcategories.

Judging Criteria for NASA Earth System Science Project Award

I. Research Question (10 points) _____ Total Points Earned

Exhibits a clear and focused purpose that displays an earth systems perspective _____

Identifies its contribution to a field of scientific study _____

Is testable using the scientific process _____

II. Design and Methodology (15 points)

Demonstrates a well designed plan and data collection methods _____

Variables and controls defined, appropriate, and complete _____

III. Data Collection, Analysis and Interpretation (20 points) _____ Total Points Earned

Clearly shows systematic data collection and analysis and consideration of factors _____

Contains the possibility of reproducibility of results _____

Displays appropriate application of mathematical and statistical methods _____

Contains sufficient data collected to support interpretation and conclusions _____

IV. Creativity (20 points) _____ Total Points Earned

The project demonstrates significant creativity in one or more of the above criteria _____

V. Presentation (35 points)

a. Poster 10 points) _____ Total Points Earned

Contains logical organization of material _____

Possesses clarity of graphics and legends _____

Clearly displays supporting documentation _____

b. Interview (25 points) _____ Total Points Earned

Clear, concise, thoughtful responses to questions _____

Exhibits understanding of basic science relevant to project and to system connections _____

Demonstrates understanding of interpretation and limitations of results and conclusions _____

Possesses a degree of independence in conducting project _____

Clear recognition of potential impact in science, society and/or economics _____

Development of quality ideas for further research _____

For team projects, contributions to and understanding of project by all members _____

TOTAL POINTS EARNED: _____